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THE COPPER WALL PROJECT

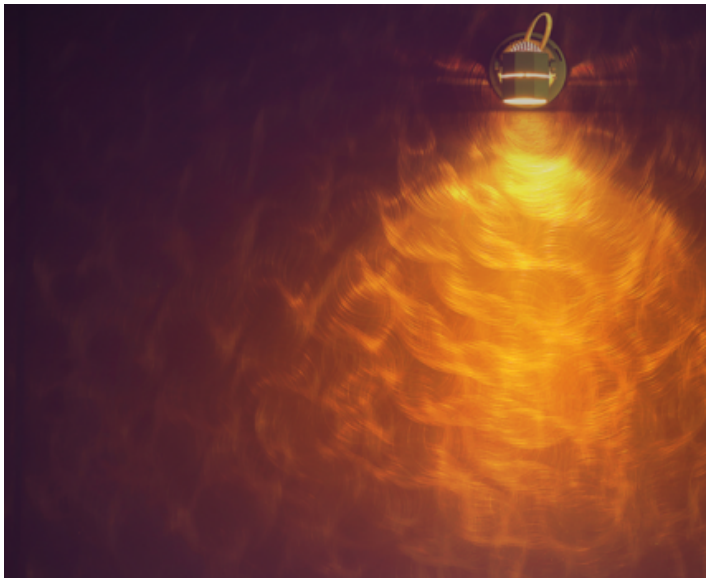
Researching the physiological generation of high voltages and electric fields in humans.

by Ross Dunseath, TMI Research Coordinator

Ross is an electrical engineer who has been involved in consciousness and physiological monitoring research since his undergrad days at the Experiential Learning Lab at Duke University. He continued his education at Duke in both engineering and psi research, earning a PhD in electrical engineering in 1992. During that time, he was involved in the design and construction of instrumentation for neurofeedback, heart monitoring, and the detection of physiological correlates of psi phenomena.

He next worked with researchers at the University of North Carolina, designing and constructing high-density EEG data acquisition systems, with applications in simultaneous fMRI and EEG imaging. In 2010 he joined the staff at the Division of Perceptual Studies at the University of Virginia where he is the co-director of the Westphal Neuroimaging Lab and is engaged in physiological studies of psi phenomena.

TMI presents a great opportunity for research in consciousness and human potentials, and Ross is busy upgrading the technical foundation in the labs for launching all kinds of studies.



Are you an “exceptional” generator? TMI’s Copper Wall project is gearing up to study body-generated electric fields comparing regular and exceptional participants.

The Millennium Room at Roberts Mountain Retreat (RMR) is the lab with the pyramid roof that's connected to the log cabin where Robert Monroe once engaged in out-of-body explorations. If you have done a PREP session at RMR, you have been in the booth in the Millennium Room. You went down the stairs and into the booth entrance on the left side.

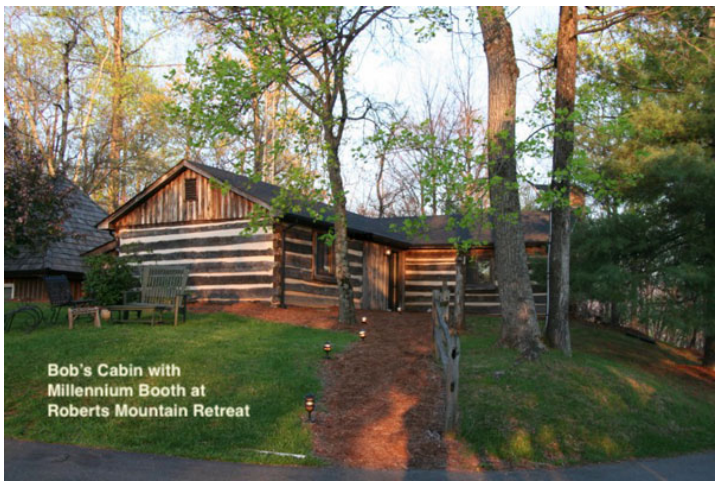
On the opposite side, where you probably didn't go, is a hallway with a mirror at the end. The mirror is part of a Psychomanteum, which we are planning to finish this coming year. However, there is an additional facility now under construction in the front end of the hallway, a Copper Wall Room.

We have the pioneering work of Elmer Green and company at the Menninger Institute, and before that Tibetan monks, to thank for the concept of copper wall rooms and instrumentation. Starting in the 1980s, Green built two versions of rooms with polished copper panels on some of the walls and a strong magnet suspended from the ceiling. He describes the motivation and design of these rooms in *Copper Wall Research Technical Note 1; Consciousness, Psychophysiology and Psychophysics: An Overview,* published in 1990 by The Menninger Institute in Topeka, Kansas.

The Tibetans originally used these rooms as a method for enhancing what they called "lucidity." A letter from a meditation teacher to A. P. Sinnett, editor of *The Pioneer,* the best-known English-language newspaper of India in 1882, described the process:

The methods used for developing lucidity in our chelas [student monks in Tibet] may be easily used by you. Every temple has a dark room, the north wall of which is entirely covered with a sheet of mixed metal, chiefly copper, very highly polished, with a surface capable of reflecting in it things, as well as a mirror. The chela sits on an insulated stool, a three-legged bench placed in a flat-bottomed vessel of thick glass. … A magnet with the North Pole up is suspended over the crown of the chela's head without touching it. [The chela is left] alone gazing on the wall. ...

Green and researchers went on to find that the design also enabled the measurement of electric fields surrounding the body and that some people were generating rather large fields (tens of volts), much higher than expected from the usual electrophysiological sources in the body such as heart, muscle, and brain activity. In fact, there is no known physiological basis for these fields at this time. Healers and meditators produced the high fields, with healers producing the highest fields in Green's study.



Since Green's efforts, nothing has been done to replicate this work by the scientific community, probably because there is no theory to account for the generation of large voltage potentials physiologically. Lacking a theory, many scientists and most funding agencies are unwilling to embark on uncertain research (see, for example, ESP research). However, Green and his research team were extremely careful to rule out alternative explanations for their findings and kept meticulous records.

Because of Green’s thoroughness, we can assume a certain confidence to forge ahead, attempt replication, and hopefully move the science forward. This is now underway in the Millennium Room at TMI. Copper Wall Room construction begins with an electrically insulated platform. As the Tibetans somehow figured out, the *chelas* (student monks) using a copper wall room as a meditation aid had to be electrically insulated from ground. This was a clue for Elmer Green that the Tibetans were onto some aspect of body-generated electricity.

We're now into the insulated platform construction aspect at RMR, using tempered glass as the insulator. This comes after upgrades to the roofing and ventilation in the Millennium Room, with help from Edd Edwards, a healer who will be participating in future electric field studies with the Copper Wall.

The finished Copper Wall Room will be more like a Copper Wall Booth, with the participant sitting up and facing the shiny reflective copper wall. The copper panel is not only a meditation aid. In addition, it is connected to an electric-field-detection amplifier for measuring the electric field around the participant.

Since body movement can cause unwanted changes in the measured field, we plan to include a video camera and a motion sensor in the measurement array. The goal is to sit quietly while taking the field measurement. We're also planning to incorporate some video processing for imaging subtle energy fields to see if there is a correlation to electric field measurements.

Opportunities for research and exploration abound! For example—

- What are the effects on the body's electric fields before and after a PREP session?
- What are some effects on consciousness exploration while sitting in the Copper Wall Room?
- Do healers really have more electric power than meditators?
- What is the distribution of body electric fields in various populations?
- Do some folks really generate unusually high voltages and electric fields?

Ultimately, we can imagine having some type of real-time electric field biofeedback if it turns out body electric fields are really what Elmer Green seems to have found.

Meanwhile, construction continues. We hope to have a basic Copper Wall Room in place before 2019. Stay tuned for future updates!